

Megan Konar

Associate Professor

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Education

- 2012 **Ph.D.**, Civil and Environmental Engineering, Princeton University
Advisor: Ignacio Rodríguez-Iturbe
Certificate in Science, Technology, and Environmental Policy
- 2009 **M.S.**, Civil and Environmental Engineering, Princeton University
- 2005 **M.S.**, Water Science, Policy, and Management, University of Oxford
- 2002 **B.S.**, (with honors) Conservation and Resource Studies, University of California at Berkeley

Academic Appointments

- 2020-present **Associate Professor**, Civil and Environmental Engineering Department, University of Illinois at Urbana-Champaign (UIUC)
- 2022-2023 **Visiting Fellow**, School of Geography and the Environment, University of Oxford
- 2020-2022 **Director**, Center for Food Systems Security, UIUC
- 2014-2019 **Research Scholar**, Institute of Government and Public Affairs, UIUC
- 2013-2020 **Assistant Professor**, Civil and Environmental Engineering Department, UIUC

Honors and Awards

- 2022 **Walter L. Huber Civil Engineering Research Prize**,
Award from the American Society of Civil Engineers (ASCE)
- 2022 **Dean's Award for Excellence in Research**,
Grainger College of Engineering Award at the Associate Professor level
- 2020-2021 **Office of Risk Management & Insurance Research (ORMIR) Faculty Fellowship**,
Fellowship from the Gies College of Business
- 2020 **Campus Distinguished Promotion Award**,
Recognition from the Provost of the University of Illinois at Urbana-Champaign
- 2019 **Hydrologic Science Early Career Award**,
Honor from the American Geophysical Union (AGU) Hydrology Section

- 2019 **NSF CAREER Award**,
Faculty early career grant from the National Science Foundation
- 2018- **List of Teachers Ranked as Excellent**,
Teaching honor based on student course evaluation
- 2017 **William J. and Elaine F. Hall Faculty Fellow in Civil & Environmental Engineering**,
Named fellowship in support of a junior faculty member
- 2013 **DISCCRS VIII Symposium Scholar**,
DISsertations initiative for the advancement of Climate Change ReSearch week-long workshop
- 2011-2012 **Princeton Energy and Climate Scholarship, Princeton Environmental Institute**,
Two-year partial tuition support and stipend
- 2010-2012 **Ford Fellow, Woodrow Wilson School of Public and International Affairs**,
Two-year partial tuition support and stipend
- 2010 **Predoctoral Fellowship, Association for Women in Science**,
Supplemental stipend support
- 2007-2010 **Graduate Research Fellowship, National Science Foundation**,
Three-year tuition support and stipend
- 2007 **Holly A. Cornell Scholarship, American Water Works Association**,
Supplemental stipend support
- 2005 **Hertford College Travel Grant, University of Oxford**,
Funding to conduct international fieldwork
- 2003 **Certificate of Appreciation, Federal Emergency Management Agency**,
For service with the U.S. Army Corps of Engineers during Hurricane Isabel
- 2001 **Forestry Fellowship, University of California at Berkeley**,
Support for forestry summer field program

Research Grants

Total grant funding is \$37,487,323 (Konar Group \$3,354,168)

- 2024-2026 **“Resilient agricultural supply chains against climate hazards (RASCCH)”**, Co-PI with PI Yanfeng Ouyang (UIUC), Co-PI Nicolas Federico Martin (UIUC), and Co-PI Jessica Wedow (UIUC), Joint Climate Solutions Program, Center for Advanced Climate Solutions (CACS), UIUC, \$100,000
- 2023-2028 **“The Climate-Food-Urbanization Nexus and the Precursors of Instability in Africa”**, Co-PI with PI Katherine Baylis (University of California at Santa Barbara), Co-PI Tom Evans (University of Arizona), Co-PI Kelly Caylor (University of California Santa Barbara), Co-PI Lyndon Estes (Clark University), and Co-PI Cascade Tuholske (Montana State University), Minerva Research Initiative, Department of Defense, \$3,073,150
- 2023-2023 **“Predicting the effect of climate extremes on the food system to improve resilience of global and local food security”**, Senior Personnel with PI Katherine Baylis (University of California Santa Barbara), Co-PI Michael Hayes (University of Nebraska Lincoln), Co-PI Christopher Funk, Kelly Caylor (UCSB), and Co-PI Erin Lentz (University of Texas Austin), National Science Foundation, \$748,674

- 2023-2028 **“Building Resilience to Multiple Shocks: Creating Sustainable Agri-food Systems in the US Midwest Region and Beyond”**, Co-PI with PI Brent Ross (Michigan State University), Co-PI Jianguo Liu, Sue Nichols, Andrés Viña, Judith Whipple, Julie Winkler, Felicia Wu, Bryan Beverly, Kenneth Frank (Michigan State University), Co-PI Darlene Knipe, Richard Knipe (Global Food and Ag Network), Co-PI Chyi-Iyi Liang (North Carolina Agricultural and Technical State University), Co-PI Maria Marshall (Purdue University), Co-PI Sai Naik (Mavin Global Company), Co-PI Jennifer Robinson (Indiana University), Co-PI Dennis Todey (USDA Midwest Climate Hub), and Co-PI Lav Varshney (UIUC), U.S. Department of Agriculture, \$10,000,000
- 2021-2026 **“SRS RN: Multiscale RECIPES (Resilient, Equitable, and Circular Innovations with Partnership and Education Synergies) for Sustainable Food Systems”**, Co-PI with PI Sauleh Siddiqui (American University), Co-PI Callie Babbitt (Rochester Institute of Technology), Co-PI Celeste Chavis (Morgan State University), Co-PI Roni Neff (Johns Hopkins University), and Co-PI Brian Roe (The Ohio State University), National Science Foundation, \$12,000,000
- 2021-2022 **“U.S.-China Bilateral Food Supply Chain Analysis”**, PI, MITRE Corporation, \$75,028
- 2020-2021 **“U.S. Food Flows: A Cold-Chain Network Analysis of Freight Movements to Inform Local and Regional Food Issues”**, Co-PI with PI Michelle Miller (UW Madison), U.S. Department of Agriculture, \$126,873
- 2020-2021 **“RAPID: Spatial Resilience of Food Production, Supply Chains, and Security to COVID-19”**, Co-PI with PI Tom Evans (U Arizona), Co-PI Zackry Guido (U Arizona), and Co-PI Katherine Baylis (UIUC), National Science Foundation, \$199,905 (BCS-2032065)
- 2020 **“A county-level map of biofuel flows and balances”**, PI, Shell, \$31,500
- 2019-2024 **“CAREER: A National Strategy for a Resilient Food Supply Chain”**, PI, National Science Foundation, \$509,877 (CBET-1844773)
- 2019-2023 **“CNH2-L: Feedbacks between Urban Food Security and Rural Agricultural Systems”**, Co-PI with PI Tom Evans (University of Arizona), Co-PI Katherine Baylis (UIUC), Co-PI Kelly Caylor (University of California Santa Barbara), and Co-PI Lyndon Estes (Clark University), National Science Foundation, \$1,599,627 (DEB-1924309)
- 2019-2020 **“Exposure of Urban Food-Energy-Water (FEW) Systems to Water Scarcity”**, PI with Co-PI Ashlynn Stillwell (UIUC) and Co-PI Tingju Zhu (Zhejiang University), Zhejiang University - UIUC Institute Research Program, \$75,000
- 2017-2019 **“Global virtual water trade”**, Co-PI with PI Sandy Dall’erba (UIUC) and Co-PI Francina Dominguez (UIUC), Future Interdisciplinary Research Explorations (FIRE) program, Office of Research, UIUC, \$60,000
- 2016-2020 **“INFEWS/Track 1: Mesoscale Data Fusion to Map and Model the U.S. FEW system (FEW-Sion)”**, Institutional PI (UIUC) with PI Benjamin L. Ruddell (Northern Arizona University), Institutional PI John Sabo (Arizona State University), Institutional PI Christopher Lant (Utah State University), and Institutional PI Alfonso Mejia (Penn State University), National Science Foundation, \$3,000,000 (ACI-1639529)

- 2015-2019 **“Hazards SEES: Understanding cross-scale interactions of trade and food policy to improve resilience to drought risk”**, Institutional PI (UIUC) with PI Justin Sheffield (Princeton University), Co-PI Kelly Caylor (Princeton University), Co-PI Lyndon Estes (Princeton University) and Institutional PI Tom Evans (Indiana University), National Science Foundation, \$2,519,689 (BCS-1534544)
- 2014-2019 **“Climate change in Illinois”**, Co-PI with PI Don Fullerton (UIUC) and Co-PI Julian Reif (UIUC), Institute of Government and Public Affairs, UIUC, \$125,000
- 2014-2015 **“Towards socio-hydrologic synthesis: modeling the co-evolutionary dynamics of coupled human, water, and ecological systems”**, Co-PI with PI Murugesu Sivapalan (UIUC) and Co-PI Tara Troy (Lehigh University), National Science Foundation Socio-Environmental Synthesis Center (SESYNC), \$90,000
- 2014 **“Extending the curriculum content of an existing sketch recognition tutoring system with immediate feedback to engage cross-disciplinary instructors”**, Co-PI with PI Joshua Peschel (UIUC) and Co-PI Cassandra Rutherford (UIUC), Strategic Instructional Initiatives Program, UIUC, \$68,000
- 2014 **“Risk management and water resources sustainability”**, Co-PI with PI Tatyana Deryugina (UIUC), Research Board, UIUC, \$10,000 (ID# RB14188)
- 2013 **“A flow net sketch recognition tutoring system: Improved student learning through mobile active learning and immediate student feedback”**, Co-PI with PI Joshua Peschel (UIUC) and Co-PI Cassandra Rutherford (UIUC), Strategic Instructional Initiatives Program, UIUC, \$50,000
- 2013 **“Advancing socio-hydrology, a new science of people and water”**, Co-PI with PI Murugesu Sivapalan (UIUC) and Co-PI Ximing Cai (UIUC), Research Thrust Program, Civil and Environmental Engineering, UIUC, \$25,000

Peer-Reviewed Publications

* indicates current or former Konar Group student

64. Ruess, P.J.*, **M. Konar**, N. Wanders, and M.F.P. Bierkens (2024) Total irrigation by crop in the Continental United States from 2008 to 2020, *Scientific Data*, Vol 11, No 395, doi: 10.1038/s41597-024-03244-w.
63. Karakoc, D.B.* and **M. Konar** (2024) Optimization of national grain imports to balance risk and return: A portfolio theory approach, *Environmental Research: Food Systems*, Vol 1, No 011001, doi: 10.1088/2976-601X/ad22d1.
62. Wang, J.*, **M. Konar**, K. Baylis, L. Estes, P. Hadunka, S. Xiong, and K. Caylor (2023) Potential impacts of transportation infrastructure improvements to maize and cassava supply chains in Zambia, *Environmental Research: Infrastructure and Sustainability*, Vol 3, No 045006, doi: 10.1088/2634-4505/ad04e4.
61. Pandit, A.*, D.B. Karakoc*, and **M. Konar** (2023) Spatially detailed agricultural and food trade between China and the United States, *Environmental Research Letters*, Vol 18, No 8, doi: 10.1088/1748-9326/ace72c.
60. Sun, S., **M. Konar**, Q. Tang, G. Fu, C. Fang, J. Wang, Y. Ni, T. Ma (2023) Tracing surface water pollution in China’s supply chain, *Journal of Hydrology*, Vol 624, pp. 129960, doi: 10.1016/j.jhydrol.2023.129960.

59. Karakoc, D.B.* , **M. Konar**, M.J. Puma, and L.R. Varshney (2023) Structural chokepoints determine the resilience of agri-food supply chains in the United States, *Nature Food*, Vol 4, pp. 607-615, doi: 10.1038/s43016-023-00793-y.
58. Cecil, M., A. Chilenga, C. Chisanga, N. Gatti, N. Krell, Noemi Vergopolan, K. Baylis, K. Caylor, T. Evans, **M. Konar**, J. Sheffield, and L. Estes (2023) How much control do smallholder maize farmers have over yield?, *Field Crops Research*, Vol 301, No 109014, doi: 10.1016/j.fcr.2023.109014.
57. Yang, J., J. Chang, **M. Konar**, Y. Wang, and J. Yao (2023) The grain Food-Energy-Water nexus in China: Benchmarking sustainability with generalized data envelopment analysis, *Science of the Total Environment*, Vol 887, No 164128, doi: 10.1016/j.scitotenv.2023.164128.
56. Ao, Y., M. Siddik, **M. Konar**, and L. Marston (2023) Food, Energy, and Water production within watersheds of the United States, *Water Resources Research*, Vol 69, Issue 5, doi: 10.1029/2022WR034031.
55. Ruess, P.J.* , **M. Konar**, N. Wanders, and M.F.P. Bierkens (2023) Irrigation by crop in the Continental United States from 2008 to 2020, *Water Resources Research*, doi: 10.1029/2022WR032804.
54. Sun, S., Q. Tang, **M. Konar**, C. Fang, X. Liu, X. Liu, and G. Fu (2023) Water transfer infrastructure buffers water scarcity risks to supply chains, *Water Research*, Vol 229, Issue 119442, doi: 10.1016/j.watres.2022.119442.
53. Lesk, C., W. Anderson, A. Rigden, O. Coast, J. Jägermeyr, S. McDermid, K.F. Davis, and **M. Konar** (2022) Impacts of compound heat and moisture extremes on global crop yields under climate change, *Nature Reviews Earth & Environment*, Vol 3, pp. 872-889, doi: 10.1038/s43017-022-00368-8.
52. Wang, J.* , **M. Konar**, C. Dalin, Y. Liu, A. S. Stillwell, M. Xu, and T. Zhu (2022) Economic and virtual water multilayer networks in China, *Journal of Cleaner Production*, Vol 381, pp. 125041, doi: 10.1016/j.jclepro.2022.135041.
51. Sun, S., Q. Tang, **M. Konar**, Z. Huang, T. Gleeson, T. Ma, C. Fang, and X. Cai (2022) Domestic groundwater depletion supports China's full supply chains, *Water Resources Research*, Vol 58, Issue 5, doi: 10.1029/2021WR030695.
50. Wang, J.* , D.B. Karakoc* , and **M. Konar** (2022) The carbon footprint of cold chain food flows in the United States, *Environmental Research: Infrastructure and Sustainability*, Vol 2, pp. 0021002, doi: 10.1088/2634-4505/ac676d.
49. Reed, P.M., A. Hadjimichael, R.H. Moss, C. Brelsford, C.D. Burleyson, S. Cohen, A. Dyreson, D.F. Gold, R.S. Gupta, K. Keller, **M. Konar**, E. Monier, J. Morris, V. Srikrishnan, N. Voisin, J. Yoon (2022) MultiSector Dynamics: Advancing the science of complex adaptive human-earth systems, *Earth's Future*, Vol 10, Issue 3, pp. e2021EF002621, doi: 10.1029/2021EF002621.
48. Karakoc, D.B.* , J. Wang* , and **M. Konar** (2022) Food flows between counties in the United States from 2007 to 2017, *Environmental Research Letters*, Vol 17, pp. 034035, doi: 10.1088/1748-9326/ac5270.
47. Debaere, P. and **M. Konar** (2022) Water resources and trade: A research vision, *PLOS Water*, Vol 1, Issue 2, pp. e0000010, doi: 10.1371/journal.pwat.0000010.

46. Karakoc, D.B.* and **M. Konar** (2021) A complex network framework for the efficiency and resilience trade-off in global food trade, *Environmental Research Letters*, Vol 16, pp. 105003, doi: 10.1088/1748-9326/ac1a9b.
45. Jackson, N.* , **M. Konar**, P. Debaere and J. Sheffield (2021) Crop-specific exposure to extreme temperature and moisture for the globe for the last half century, *Environmental Research Letters*, Vol 16, Issue 6, pp. 064006, doi: 10.1088/1748-9326/abf8e0.
44. Vergopolan, N., S. Xiong, L. Estes, N. Wanders, N.W. Chaney, E.F. Wood, **M. Konar**, K. Caylor, H.E. Beck, N. Gatti, T. Evans, and J. Sheffield (2021) Field-scale soil moisture bridges the spatial scale gap between drought monitoring and agricultural yields, *Hydrology and Earth System Sciences*, Vol 25, Issue 4, pp. 1827-1847, doi: 10.5194/hess-25-1827-2021.
43. Falkendal, T., C. Otto, J. Schewe, J. Jägermeyr, **M. Konar**, M. Kummu, B. Watkins, and M.J. Puma (2021) Grain export restrictions during COVID-19 risk food insecurity in many low-and middle-income countries, *Nature Food*, Vol 2, pp. 11-14, doi: 10.1038/s43016-020-00211-7.
42. **Konar, M.** and L. Marston* (2020) The Water Footprint of the United States, *Water*, Vol 12, Issue 11, pp. 3286, doi: 10.3390/w12113286.
41. von Gnechten, R.* , J. Wang* , **M. Konar**, K. Baylis, P. Anderson, S. Giroux, N. Jackson* , and T. Evans (2020) A gravity model and network analysis of household food sharing in Zambia, *Environmental Research Letters*, Vol 15, pp. 115010, doi: 10.1088/1748-9326/abbe44.
40. Gumidyala, S.* , P.J. Ruess* , **M. Konar**, L. Marston* , C. Dalin, and Y. Wada (2020) Groundwater depletion embedded in transfers and exports of the United States, *Water Resources Research*, Vol 56, Issue 2, pp. e2019WR024986, doi: 10.1029/2019WR024986.
39. He, X., L. Estes, **M. Konar**, D. Tian, D. Anghileri, K. Baylis, T.E. Estes, and J. Sheffield (2019) Integrated approaches to understanding and reducing drought impact on food security across scales, *Current Opinion in Environmental Sustainability*, Vol 40, pp. 43-54, doi: 10.1016/j.cosust.2019.09.006.
38. Jackson, N.* , **M. Konar**, P. Debaere, and L. Estes (2019) Probabilistic global maps of crop-specific areas from 1961 to 2014, *Environmental Research Letters*, doi: 10.1088/1748-9326/ab3b93.
37. Di Baldassarre, G., M. Sivapalan, M. Rusca, C. Cudennec, M. Garcia, H. Kreibich, **M. Konar**, E. Mondino, J. Mård, S. Pande, M.R. Sanderson, F. Tian, A. Viglione, J. Wei, Y. Wei, D.J. Yu, V. Srinivasan, and G. Blöschl (2019), Socio-hydrology: Scientific challenges in addressing a societal grand challenge, *Water Resources Research*, doi: 10.1029/2018WR023901.
36. Lin, X.* , P.J. Ruess* , L. Marston* , and **M. Konar** (2019) Food flows between counties in the United States, *Environmental Research Letters*, Vol 14, Issue 3, pp. 084011, doi: 10.1088/1748-9326/ab29ae
35. Djehdian, L., C. Chini, L. Marston* , **M. Konar**, and A.S. Stillwell (2019) Exposure of urban Food-Energy-Water (FEW) systems to water scarcity, *Sustainable Cities and Society*, Vol 50, pp. 101621, doi: 10.1016/j.scs.2019.101621.
34. Ruess, P.* and **M. Konar** (2019) Grain and virtual water storage capacity in the United States, *Water Resources Research*, Vol 55, pp. 3960-3975, doi: 10.1029/2018WR024292.

33. D’Odorico, P., J. Carr, C. Dalin, J. Dell’Angelo, **M. Konar**, F. Laio, L. Ridolfi, L. Rosa, S. Suweis, S. Tamea, and M. Tuninetti (2019) Global virtual water trade and the hydrological cycle: Patterns, drivers, and socio-environmental impacts, *Environmental Research Letters*, Vol 14, Issue 5, pp. 053001, doi: 10.1088/1748-9326/ab05f4.
32. Lant, C., J. Baggio, **M. Konar**, A. Meija, B. Ruddell, R. Rushforth, J. Sabo, and T. Troy (2019), The U.S. food-energy-water system: A blueprint to fill the mesoscale gap for science and decision-making, *Ambio*, Vol 48, Issue 3, pp. 251–263, doi: 10.1007/s13280-018-1077-0.
31. **Konar, M.**, M. Garcia, M.R. Sanderson, D.J. Yu, and M. Sivapalan (2019) Expanding the scope and foundation of sociohydrology as the science of coupled human-water systems, *Water Resources Research*, Vol 55, Issue 2, pp. 874–887, doi: 10.1029/2018WR024088.
30. Dang, Q.*, **M. Konar**, and P. Debaere (2018) Trade openness and the nutrient use of nations, *Environmental Research Letters*, Vol 13, Issue 12, pp. 124016, doi: 10.1088/1748-9326/aaebcb.
29. **Konar, M.**, X. Lin*, B. Ruddell, and M. Sivapalan (2018), Scaling properties of food flow networks, *PLoS ONE*, Vol 13, Issue 7, pp. e0199498, doi: 10.1371/journal.pone.0199498.
28. Marston, L.* , Y. Ao*, **M. Konar**, M. Mekonnen, and A.Y. Hoekstra (2018), High-resolution water footprints of production of the United States, *Water Resources Research*, Vol 54, pp. 2288-2316, doi: 10.1002/2017WR021923.
27. Ou, S., S. Liang, **M. Konar**, Z. Zhu, A. Chiu, X. Jia, and M. Xu (2018), Virtual water scarcity risk to the global trade system, *Environmental Science & Technology*, Vol 52, Issue 2, pp. 673-683, doi: 10.1021/acs.est.7b04309.
26. Dang, Q.* and **M. Konar** (2018), Trade openness and domestic water use, *Water Resources Research*, Vol 54, Issue 1, pp. 4-18, doi: 10.1002/2017WR021102.
25. Deryugina, T., and **M. Konar** (2017), Impacts of crop insurance on water withdrawals for irrigation, *Advances in Water Resources*, Vol 110, pp. 437-444, doi: 10.1016/j.advwatres.2017.03.013.
24. Wada, Y., M.F.P. Bierkens, A. de Roo, P.A. Dirmeyer, J.S. Famiglietti, N. Hanasaki, **M. Konar**, J. Liu, H. Müller-Schmied, T. Oki, Y. Pokhrel, M. Sivapalan, T.J. Troy, A.I.J.M. van Dijk, T. van Emmerik, M.H.J. van Huijgevoort, H.A.J. van Lanen, C.J. Vörösmarty, N. Wanders, and H. Wheatler (2017), Human-water interface in hydrological modeling: current status and future directions, *Hydrology and Earth System Sciences*, Vol 21, pp. 4169-4193, doi: 10.5194/hess-21-4169-2017.
23. Srinivasan, V., **M. Konar**, and M. Sivapalan (2017), A dynamic framework for water security, *Water Security*, Vol 1, pp. 12-20, doi: 10.1016/j.wasec.2017.03.001.
22. Marston, L.* and **M. Konar** (2017), Drought impacts to water footprints and virtual water transfers of the Central Valley of California, *Water Resources Research*, Vol 53, doi: 10.1002/2016WR020251.
21. Chini, C., **M. Konar**, and A.S. Stillwell (2017), Direct and indirect urban water footprints of the United States, *Water Resources Research*, Vol 53, doi: 10.1002/2016WR019473.
20. Srinivasan, V., M. Sanderson, M. Garcia, **M. Konar**, G. Blöschl, and M. Sivapalan (2016), Panta Rhei opinion: Prediction in a socio-hydrological world, *Hydrological Sciences Journal*, Vol 62, Issue 3, pp. 1-8, doi: 10.1080/02626667.2016.1253844.

19. **Konar, M.**, T.P. Evans, M. Levy, C.A. Scott, T.J. Troy, C.J. Vörösmarty, and M. Sivapalan (2016), Water resources sustainability in a globalizing world: who uses the water? *Hydrological Processes*, Vol 30, Issue 18, pp. 3330-3336, doi: 10.1002/hyp.10843.
18. **Konar, M.**, J.J. Reimer, Z. Hussein, and N. Hanasaki (2016), The water footprint of staple crop trade under climate and policy scenarios, *Environmental Research Letters*, Vol 11, Issue 3, 035006, doi: 10.1088/1748-9326/11/3/035006.
17. Dang, Q.* , **M. Konar**, J.J. Reimer, G. Di Baldassarre, R. Zeng, and X. Lin* (2016), A theoretical model of water and trade, *Advances in Water Resources*, Vol 89, pp. 32-41, doi: 10.1016/j.advwatres.2015.12.016.
16. Troy, T.J., **M. Konar**, V. Srinivasan, and S. Thompson (2015), Moving sociohydrology forward: A synthesis across studies, *Hydrology and Earth System Sciences*, Vol 19, pp. 3667-3679, doi: 10.5194/hess-19-3667-2015.
15. Paterson, W., R. Rushforth, B.L. Ruddell, **M. Konar**, I.C. Ahams, J.A. Gironás, A. Mijic, and A. Mejia (2015), Water footprint of cities: A review and suggestions for future research, *Sustainability*, Vol 7, Issue 7, pp. 8461-8490, doi: 10.3390/su7078461.
14. Marston, L.* , **M. Konar**, X. Cai, and T.J. Troy (2015), Virtual groundwater transfers from overexploited aquifers in the United States, *Proceedings of the National Academy of Sciences*, Vol 112, No 28, pp. 8561-8566, doi: 10.1073/pnas.1500457112.
13. Jackson, N.* , **M. Konar**, and A.Y. Hoekstra (2015), The water footprint of food aid, *Sustainability*, Vol 7, Issue 6, pp. 6435-6456, doi: 10.3390/su7066435.
12. Dang, Q.* , X. Lin* , and **M. Konar** (2015), Agricultural virtual water flows within the United States, *Water Resources Research*, Vol 51, Issue 2, pp. 973-986, doi: 10.1002/2014WR015919.
11. Lin, X.* , Q. Dang* , and **M. Konar** (2014), A network analysis of food flows within the USA, *Environmental Science & Technology*, Vol 48, Issue 10, pp. 5439-5447, doi: 10.1021/es500471d.
10. Sivapalan, M., **M. Konar**, V. Srinivasan, A. Chhatre, A. Wutich, C. Scott, J.L. Wescoat, and I. Rodríguez-Iturbe (2014), Socio-hydrology: Use-inspired water sustainability science for the Anthropocene, *Earth's Future*, Vol 2, pp. 225-230, doi: 10.1002/2013EF000164.
9. **Konar, M.** and K.K. Caylor (2013), Virtual water trade and development in Africa, *Hydrology and Earth System Sciences*, Vol 17, pp. 3969-3982, doi: 10.5194/hess-17-3969-2013.
8. **Konar, M.**, Z. Hussein, N. Hanasaki, D.L. Mauzerall, and I. Rodríguez-Iturbe (2013), Virtual water trade flows and savings under climate change, *Hydrology and Earth System Sciences*, Vol 17, pp. 3219-3234, doi:10.5194/hess-17-3219-2013.
7. **Konar, M.**, M.J. Todd, R. Muneerpeerakul, A. Rinaldo, and I. Rodríguez-Iturbe, (2013), Hydrology as a driver of biodiversity: Controls on carrying capacity, niche formation, and dispersal, *35th Anniversary Issue of Advances in Water Resources Research*, Vol 51, pp. 317-325, doi: 10.1016/j.advwatres.2012.02.009.
6. Dalin, C., S. Suweis, **M. Konar**, N. Hanasaki, and I. Rodríguez-Iturbe (2012), Modeling past and future structure of the global virtual water trade network, *Geophysical Research Letters*, Vol 39, Issue 24, L24402, doi: 10.1029/2012GL053871.

5. **Konar, M.**, C. Dalin, N. Hanasaki, A. Rinaldo, and I. Rodríguez-Iturbe (2012), Temporal dynamics of blue and green virtual water trade networks, *Water Resources Research*, Vol 48, Issue 7, W07509, doi: 10.1029/2012WR011959.
4. Dalin, C., **M. Konar**, N. Hanasaki, A. Rinaldo, and I. Rodríguez-Iturbe, (2012), Evolution of the global virtual water trade network, *Proceedings of the National Academy of Sciences*, Vol 109, Issue 16, pp. 5989-5994, doi: 10.1073/pnas.1203176109.
3. Suweis, S., **M. Konar**, C. Dalin, N. Hanasaki, A. Rinaldo, and I. Rodríguez-Iturbe (2011), Structure and Controls of the Global Virtual Water Trade Network, *Geophysical Research Letters*, Vol 38, Issue 10, L10403, doi: 10.1029/2011GL046837.
2. **Konar, M.**, C. Dalin, S. Suweis, N. Hanasaki, A. Rinaldo, and I. Rodríguez-Iturbe (2011), Water for food: The global virtual water trade network, *Water Resources Research*, Vol 47, Issue 5, W05520, doi: 10.1029/2010WR010307.
1. **Konar, M.**, R. Muneeppeerkul, S. Azaele, E. Bertuzzo, A. Rinaldo, and I. Rodríguez-Iturbe (2010), Potential impacts of precipitation change on large-scale patterns of tree diversity, *Water Resources Research*, Vol 46, Issue 11, W11515, doi: 10.1029/2010WR009384.

Other Publications

23. Mapping Food Flow Networks and the Food Supply Chain, Part 3; article for *farmdoc daily*, with Deniz Berfin Karakoc, 27 July 2023.
23. Mapping Food Flow Networks and the Food Supply Chain, Part 2; article for *farmdoc daily*, with Deniz Berfin Karakoc, 13 July 2023.
22. Mapping Food Flow Networks and the Food Supply Chain, Part 1; article for *farmdoc daily*, with Deniz Berfin Karakoc, 06 July 2023.
21. What the War in Ukraine Means for the World's Food Supply, Op-Ed in *The New York Times*, with Michael J. Puma, 01 March 2022.
20. MultiSector Dynamics: Scientific Challenges and a Research Vision for 2030, A Community of Practice, with Patrick Reed, Antonia Hadjimichael, Richard Moss, Erwan Monier, Sequoia Alba, Christa Brelsford, Casey Burleyson, Stuart Cohen, Ana Dyreson, David Gold, Rohini Gupta, Klaus Keller, Jordan Macknick, Jennifer Morris, Vivek Srikrishnan, Nathalie Voisin, and Jim Yoon, Supported by the United States Department of Energy's Office of Science, doi: 10.5281/zenodo.5825890, 2022.
19. Contemporary Global Food Systems as Contested Space: Implications for Special Operations Forces, with Molly M. Jahn, Aaron M. Kelly, Gregory F. Treverton, Michael S. Gremillion, Edward Cardon, Matthew A. Rose, Megan Konar, Michael J. Puma, David A. Bray, Joseph Byrum, Anthony L. Nguy-Robertson, Jean-Paul Rodrigue, Thomas L. Creely, Seth C. Murray, William L. Oemichen, and Budhikka "Jay" Jayamaha, Chapter in "Unleashing strategic latency: the role of disruptive technologies in a revisionist world with implications for Special Operations Forces", edited by Zachary S. Davis, Frank Gac, Christopher Rager, Philip Reiner, and Jennifer Snow, Center for Global Security Research, Lawrence Livermore National Laboratory, ISBN-978-1-952565-07-6.
18. We mapped how food gets from farms to your home, *The Conversation*, 25 October 2019.

17. The effect of Illinois municipal aggregation on the residential electricity market, *State Tax Notes*, with Tatyana Deryugina, Don Fullerton and Julian Reif, 01 April 2019.
16. Modelling and Monitoring Hydrological Processes, Chapter in “Water Science Policy and Management: The Global Challenge” by Oxford University Press, with Simon Dadson, Feyera Hirpa, and Patrick Thomson, 2019.
15. Virtual water trade among world countries associated with food trade, *Encyclopedia of Food Security and Sustainability*, with Carole Dalin, 2018.
14. Moving socio-hydrologic modelling forward: unpacking hidden assumptions, values and model structure by engaging with stakeholders: reply to “What is the role of the model in socio-hydrology?”, *Hydrological Sciences Journal*, with Veena Srinivasan, Matthew Sanderson, Margaret Garcia, Guenther Blöschl, and Murugesu Sivapalan, 2018, doi: 10.1080/02626667.2018.1499026.
13. Crop insurance is good for farmers, but not always for the environment, *The Conversation*, with Tatyana Deryugina, Don Fullerton and Julian Reif, 28 June 2018.
12. Does crop insurance impact water use? Institute of Government and Public Affairs Policy Brief, with Tatyana Deryugina, Don Fullerton and Julian Reif, 28 June 2018.
11. Does a carbon policy really burden low-income families? Institute of Government and Public Affairs Policy Brief, with Don Fullerton and Julian Reif, 20 April 2017.
10. Does global climate change affect air pollution in Illinois? Institute of Government and Public Affairs Policy Brief, with Don Fullerton and Julian Reif, 26 July 2016.
9. Illinois’ climate is changing, *Illinois Issues*, with Don Fullerton and Julian Reif, 31 July 2015.
8. Francis’ call for action on climate change is opportunity for Illinois, *Crain’s Chicago Business*, with Don Fullerton and Julian Reif, 23 June 2015.
7. Preparing for Climate Change in Illinois, Institute of Government and Public Affairs Policy Brief, with Kathy Baylis, Tatyana Deryugina, Don Fullerton and Julian Reif, 15 May 2015.
6. U.S. Clean Power Plan Gives Illinois a Chance for Significant State Revenue, *Illinois Issues*, with Don Fullerton and Julian Reif.
5. Quantifying the potential impacts of climate change on vegetation diversity at large spatial scales, with Ignacio Rodríguez-Iturbe, In: *The Scientific Legacy of the 20th Century: The Proceedings of the Plenary Session, 28 Oct - 1 Nov, 2010. Proceedings of the Vatican Academy of Sciences*, Vatican Press.
4. Drought boosts metering in the Southeast of England, *Global Water Intelligence*, Vol 7, Issue 7, pp. 10-11.
3. Desalination water markets in Asia, *Global Water Intelligence*, Media Analytics, Inc., Oxford, England.
2. Rainwater harvesting in rural India: Taankas in the Thar Desert, *Waterlines*, with Om Prakash Sharma, Vol 25, Issue 4, pp. 22-24.

1. The environment following terrorism, Unpublished Senior Thesis, College of Natural Resources, University of California at Berkeley. Referenced in: O'Neill, K. (2004) Transnational protest: States, circuses, and conflict at the frontline of global politics, *International Studies Review*, Vol 6, Issue 2, pp. 233-251.

Invited Seminars & Presentations

* Presentation by co-author,

** Presentation by Konar Group student

80. Structural chokepoints determine the resilience of agri-food supply chains in the United States, Oral presentation at the AGU Fall Meeting, Abstract 1319563, San Francisco, CA 11-15 December 2023.
79. Optimization of national grain imports to balance risk and return: A portfolio theory approach, Oral presentation at the AGU Fall Meeting, Abstract 1319552, San Francisco, CA 11-15 December 2023.
78. *Mapping the flows of Food, Energy, and Water supplies to US cities via infrastructure, Oral presentation at the AGU Fall Meeting, Abstract 1264584, San Francisco, CA 11-15 December 2023.
77. Balancing sustainability, resilience, and efficiency in agri-food supply chains, Ezra Round Table Systems Seminar Series, Cornell University, 17 November 2023.
76. Water use in the United States, Water Security and Global Water Resource Management, Climate Security Workshop Series, Oak Ridge National Laboratory, 20 September 2023.
75. Water resources and food supply chains, Centre of Natural Hazards and Disaster Science (CNDS), Uppsala University, 16 March 2023.
74. Water resources and food supply chains, Oxford Water Network (OWN), University of Oxford, 02 March 2023.
73. Food supply chain networks and resilience, Oxford Programme for Sustainable Infrastructure Systems (OPSIS), University of Oxford, 01 February 2023.
72. Groundwater and food supply chains, Department of Physical Geography, Utrecht University, 21 November 2022.
71. Groundwater and food supply chains, Distinguished Lecture Series, Global Institute for Water Security, University of Saskatchewan, Virtual, 02 November 2022.
70. Panelist, Plenary session: "Too much and not enough", AGU Frontiers in Hydrology Meeting, Virtual, 19-24 June 2022.
69. Water resources and food supply chains, Wolman Lecture, Johns Hopkins, 29 March 2022.
68. Water resources and food supply chains, Environmental and Water Resources Seminar, Civil and Environmental Engineering, Virginia Tech, 25 March 2022.
67. Groundwater depletion embedded in domestic transfers and international exports of the United States & Food flows between counties in the United States, Environmental and Ecological Systems Engineering Forum, The Chinese Society for Industrial Ecology, Virtual, 03 November 2021.

66. Food flows between counties in the United States, Joint Sustainable and Resilient Infrastructure Systems (SRIS) and Energy-Water-Environment Sustainability (EWES) seminar, UIUC, 01 November 2021.
65. Food flows between counties in the United States, Department of Homeland Security, Virtual, 27 October 2021.
64. Water resources and food supply chains, Water Institute, University of Waterloo, Virtual, 21 October 2021.
63. Groundwater depletion embedded in domestic transfers and international exports of the United States & Food flows between counties in the United States, Civil & Environmental Engineering Seminar, University of Pittsburgh, In-person (!), 01 October 2021.
62. Food flows between counties in the United States, Knowledge Discovery and Data mining Conference (KDD2021), Virtual, 15 August 2021.
61. Crop-specific exposure to extreme weather, Axis Re, Virtual, 23 June 2021.
60. Groundwater depletion embedded in domestic transfers and international exports of the United States, “Groundwater Scarcity: Implications for U.S. Agricultural Production and Global Food Security” webinar hosted by The National Academies of Sciences, Engineering, and Medicine, Virtual, 08 June 2021.
59. Guest lecture, CE107000, Notre Dame, Virtual, 05 May 2021.
58. Food flows between counties in the United States & A complex network framework for the efficiency and resilience trade-off in food trade, GE Research, Virtual, 03 May 2021.
57. Food flows between counties in the United States & Groundwater depletion embedded in domestic transfers and international exports of the United States, Natural Resources and Environmental Sciences Seminar, UIUC, Virtual, 09 April 2021.
56. Food flows between counties in the United States & A complex network framework for the efficiency and resilience trade-off in food trade, Civil, Environmental, and Architectural Engineering Department, University of Colorado at Boulder, Virtual, 31 March 2021.
55. Food flows between counties in the United States & A complex network framework for the efficiency and resilience trade-off in food trade, Civil and Environmental Engineering Department, Penn State, Virtual, 10 March 2021.
54. Keynote, Food supply chains and COVID-19, hosted by Arizona Institutes for Resilience, Center for Climate Adaptation Science and Solutions, and School of Geography, Development, and Environment at the University of Arizona, Virtual, 05 February 2021.
53. Panelist, National Food Law Student Network, Virtual, 06 November 2020.
52. Food flows between counties in the United States, Campus Honors Program, UIUC, Virtual, 06 October 2020.
51. Groundwater depletion in US agricultural supply chains, School of Natural Resources, University of Missouri, Virtual, 02 October 2020.
50. Food flows between counties in the United States, Guest Lecture, FHSN 499: Nexus of Food, Health, and Environmental Sustainability, Department of Food Science and Human Nutrition, UIUC, Virtual, 21 September 2020.

49. Econometrics in water resources research, Consortium of Universities for the Advancement of Hydrologic Sciences, Inc. (CUAHSI) Biennial Colloquium, Shepherdstown, WV 26-29 July 2020, NOTE: Cancelled due to COVID-19 pandemic.
48. Groundwater depletion embedded in domestic transfers and international exports of the United States & Food flows between counties in the United States, Environmental & Water Resources Seminar, Marquette University, Milwaukee WI 04 March 2020.
47. Groundwater depletion embedded in domestic transfers and international exports of the United States & Food flows between counties in the United States, Atmospheric Sciences Department, UIUC, Urbana, IL 18 February 2020.
46. Groundwater depletion embedded in domestic transfers and international exports of the United States & Food flows between counties in the United States, Department of Civil & Environmental Engineering Seminar, University of California at Irvine, Irvine, CA 24 January 2020.
45. Food flows between counties in the United States, Keynote speaker to the Supply Chain Advisory Group, UPS Public Affairs Office, Capital Hill, Washington DC, 15 January 2020.
44. Trade openness and the water and nutrient use of nations, Keynote speaker at the Water Security Week at the Mexican Institute of Water Technology, Jiutepec, Morelos, Mexico 08-13 September 2019.
43. Data science in the Food-Energy-Water nexus, Women in Data Science (WiDS) Symposium, National Center for Supercomputing Applications (NCSA), Urbana, IL 04 March 2019.
42. **Global gridded crop specific agricultural areas from 1961-2014, University of Illinois at Chicago, Chicago, IL 13 February 2019.
41. **Global gridded crop specific agricultural areas from 1961-2014, Sandia National Laboratories, Albuquerque, NM 31 January 2019.
40. Trade openness and the water and nutrient use of nations, eLightning presentation at the AGU Fall Meeting, Abstract 361254, Washington DC, 10-14 December 2018.
39. Groundwater depletion embedded in domestic transfers and international exports of the United States, Abstract ID# 322180, Session “T16. Advances in Agrohydrology: A Multidisciplinary Approach to Water Resources, Land Management, and Food Systems”, Geological Society of America Annual Meeting, Indianapolis, IN 4-7 November 2018.
38. Groundwater depletion in US food transfers and exports & Trade openness and the water and nutrient use of nations, Environmental Fluid Dynamics Lecture Series, Notre Dame, IN 02 October 2018.
37. **High-resolution water footprints of production of the United States, Oral presentation at the University Council on Water Resources Conference, Pittsburgh PA 26-28 June 2018.
36. Causal inference to understand agricultural systems, Socio-Environmental Synthesis Center (SESYNC) Boundary Spanning Symposium: Advances in Socio-Environmental Systems Research, SESYNC, Annapolis, MD 11-13 June 2018.
35. High-resolution water footprints of production in the United States & Global gridded crop specific agricultural areas from 1961-2014, Civil & Environmental Engineering Department Seminar, University of Wisconsin at Madison, Madison, WI 01 Mar 2018.

34. Global gridded crop specific agricultural areas from 1961-2014, Oral presentation at the AGU Fall Meeting, Abstract 208374, New Orleans, LA 11-15 December 2017.
33. Water use data to enhance scientific and policy insight, Panel presentation at the AGU Fall Meeting, Abstract 244085, New Orleans, LA 11-15 December 2017.
32. Drought impacts to water footprints and virtual water transfers of the Central Valley of California, Civil & Environmental Engineering Department Seminar, University of Iowa, Iowa City IA 03 November 2017.
31. Data science in food, energy, and water, Illinois Data Science Symposium, UIUC, Champaign, IL 10 October 2017.
30. Drought impacts to water footprints and virtual water transfers of the Central Valley of California, Civil & Environmental Engineering Department Seminar, Cornell University, Ithaca NY 14 September 2017.
29. Scaling properties of commodity flow networks, Oral presentation at the JpGU-AGU Joint Meeting, Abstract C000320, Japan, 20-25 May 2017.
28. Drought impacts to water footprints and virtual water transfers of the Central Valley of California, Oral presentation at the JpGU-AGU Joint Meeting, Abstract C000153, Japan, 20-25 May 2017.
27. Panelist, Machine Learning: Farm-To-Table Workshop, UIUC, Champaign, IL 18-20 April 2017.
26. Plenary Speaker, Drought impacts to water footprints and virtual water transfers of the Central Valley of California, “The Fate of the Earth: Water in the Climate-Food-Energy-Water Nexus”, Michigan State University, Lansing, MI 12-14 April 2017.
25. Panelist, Water and globalization panel, Rose-Hulman Institute of Technology, Terre Haute, IN 20 October 2016.
24. Drought impacts to water footprints and virtual water transfers of the Central Valley of California, Ezra’s Round Table Systems Seminar, Cornell University, Ithaca, NY 14 October 2016.
23. Drought impacts to water footprints and virtual water transfers of the Central Valley of California, Regional Economics Applications Laboratory (REAL) seminar, UIUC, Champaign, IL 20 September 2016.
22. Drought impacts to water footprints and virtual water transfers of the Central Valley of California, Virtual water in agricultural products: Quantification, limitations, and trade policy workshop, University of Nebraska at Lincoln, Lincoln, NE 15 September 2016.
21. Drought impacts to water footprints and virtual water transfers of the Central Valley of California, Food and Data Workshop: Interoperability through the Food Pipeline, UIUC, Champaign, IL 12 September 2016.
20. Virtual groundwater transfers from overexploited aquifers of the United States & Crop insurance increases withdrawals for irrigation in agriculture, America’s Water Webinar, Columbia University, 08 Dec 2015.
19. Virtual groundwater transfers from overexploited aquifers of the United States, Exchange Club of Urbana, Urbana, IL 12 Nov 2015.

18. Virtual groundwater transfers from overexploited aquifers of the United States & Crop insurance increases withdrawals for irrigation in agriculture, Atmospheric Sciences Department, UIUC, Champaign, IL 11 Sept 2015.
17. A network analysis of food flows within the United States, Transport Chicago, Chicago, IL 12 Jun 2015.
16. Virtual groundwater transfers from overexploited aquifers of the United States, London School of Economics, London, United Kingdom, 27 May 2015.
15. Panelist, Let's Talk About Water, Illinois Water Day, UIUC, Champaign, IL, 10 Apr 2015.
14. Virtual groundwater transfers from overexploited aquifers of the United States, École polytechnique fédérale de Lausanne, Lausanne, Switzerland, 01 Apr 2015.
13. Food trade and its water footprint under climate and policy scenarios, Poster presentation at the AGU Fall Meeting, Abstract H13I-1217, San Francisco, CA 15-19 Dec 2014.
12. Food and virtual water transfers in the USA, Program in Environment and Resource Economics Brown Bag Series, UIUC, Champaign, IL 15 Sept 2014.
11. Network analysis of food and virtual water flows in the USA, Construction Engineering Research Laboratory (CERL), United States Army Corps of Engineers, Champaign, IL 18 Jun 2014.
10. Virtual water trade and development in Africa, Oral presentation at the European Geosciences Union General Assembly, Vienna, Austria 01 May 2014.
9. The water footprint of food trade under climate change, International Institute for Applied Systems Analysis, Vienna, Austria 28 Apr 2014.
8. The water footprint of food trade under climate change, Institute of Government & Public Affairs, UIUC, Urbana, IL 23 Apr 2014.
7. The water footprint of trade under climate change, Earth Sciences Department, Indiana University-Purdue University Indianapolis, Indianapolis, IN 3 Mar 2014.
6. *Observed and potential global pathways of virtual water trade, Session "Socio-hydrology: Co-evolution and future of human-water resource systems", 2013 American Association for the Advancement of Science (AAAS) Annual Meeting, Boston, MA 15 Feb 2013.
5. Virtual water trade flows under climate change, Urban Networks Workshop, Arizona State University, Tempe, AZ 1-2 Nov 2012.
4. Virtual water trade flows under climate change, Session "Predictions Under Change (PUC): Visions for understanding and managing water, Earth and biota in the Anthropocene", CUAHSI 3rd Biennial Colloquium on Hydrologic Science and Engineering, UCAR, Boulder, CO 17-18 July 2012.
3. Water for biodiversity and food, Natural Resources and Environmental Sciences Department, UIUC, 30 March 2012.
2. Water for biodiversity and food, Civil & Environmental Engineering Department, UIUC, 2 April 2012.
1. Hydrologic drivers of tree biodiversity: The impact of climate change, AGU Fall Meeting, Abstract H31G-05, San Francisco, CA, 14-18 December 2010.

Presentations

* Presentation by co-author,

** Presentation by Konar Group student

70. **Mapping agri-food flows on multi-modal transportation infrastructure, Poster presentation at the AGU Fall Meeting, Abstract 1405758, San Francisco, CA 11-15 December 2023.
69. **Irrigation by produce and animal feed crop in the Continental United States from 2008 to 2020, eLightning presentation at the AGU Fall Meeting, Abstract H24B-02, San Francisco, CA 11-15 December 2023.
68. * A pathway to implementation of sustainability, equity, and resilience metrics in wasted food models, Poster presentation at the AGU Fall Meeting, Abstract 1426448, San Francisco, CA 11-15 December 2023.
67. **Chokepoints determine the resilience of agri-food supply chains in the United States, Multi-Sector Dynamics Workshop, University of California at Davis, Davis, CA 03-05 October 2023.
66. Infrastructure supporting food supply chains, Multi-Sector Dynamics Workshop, University of California at Davis, Davis, CA 03-05 October 2023.
65. **Structural chokepoints of agri-food supply chains in the United States, American Society of Civil Engineers (ASCE) Inspire, Infrastructure Innovation and Adaptation for a Sustainable and Resilient World, Arlington, VA 16-18 November 2023.
64. **High-resolution mapping of US-China bilateral agricultural and food supply chains, Poster presentation at the AGU Fall Meeting, Abstract 1101786, Chicago, IL 12-16 December 2022.
63. **Irrigation trade flows and water footprints of grains, produce, and animal feed in the CONUS in 2012 and 2017, Poster presentation at the AGU Fall Meeting, Abstract 1191260, Chicago, IL 12-16 December 2022.
62. *Food, energy, and water production within United States watersheds (Invited), Poster presentation at the AGU Fall Meeting, Abstract 1046943, Chicago, IL 12-16 December 2022.
61. **The carbon footprint of cold chain food flows in the United States, Oral presentation at the INFORMS Annual Meeting, Indianapolis, IN, 16-19 October 2022.
60. **Irrigation by crop in the Continental United States from 2008 to 2020, Poster presentation at Sustain Valencia 2022: Achieving Sustainable Groundwater Management: Promising Directions and Unresolved Challenges, Valencia, Spain, 6-8 October 2022.
59. *Leveraging high-resolution gridded datasets and AquaCrop to improve remote sensing-based estimates of smallholder maize yields, Poster presentation at the AGU Fall Meeting, Abstract H55E-0793, New Orleans, LA 13-17 December 2021.
58. **The carbon footprint of cold chain food flows between counties in the United States, Poster presentation at the AGU Fall Meeting, Abstract GC45E-0865, New Orleans, LA 13-17 December 2021.
57. **Food flows between US counties from 2007 to 2017, Poster presentation at the AGU Fall Meeting, Abstract GC25D-0683, New Orleans, LA 13-17 December 2021.
56. **Crop-specific groundwater use and depletion in the Continental United States, Oral presentation at the AGU Fall Meeting, Abstract H12C-02, New Orleans, LA 13-17 December 2021.

55. **Food flows between US counties through time, Oral presentation at the INFORMS Annual Meeting, Anaheim, CA, 24-27 October 2021.
54. **Resilience and efficiency in food trade networks, Oral presentation at the AGU Fall Meeting, Abstract GH023-07, Virtual 1-17 December 2020.
53. **Exposure of urban Food-Energy-Water (FEW) supply chains to water scarcity in China, Poster presentation at the AGU Fall Meeting, Abstract GC041-0007, Virtual 1-17 December 2020.
52. **How does trade impact agricultural productivity?, Poster presentation at the AGU Fall Meeting, Abstract GC024-0008, Virtual 1-17 December 2020.
51. Crop-specific exposure to extreme temperature and wetness for the globe for the last half century, Poster presentation at the AGU Fall Meeting, Abstract GC024-0005, Virtual 1-17 December 2020.
50. **Resilience and efficiency in food trade networks, Oral presentation at the INFORMS Annual Meeting, Virtual 7-13 November 2020.
49. *How sociohydrology can help address the global water crisis and meet the sustainable development goals, Oral presentation at the EGU General Assembly, Abstract EGU2020-22381, Vienna, Austria, 20-24 April 2020.
48. **Groundwater depletion embedded in domestic transfers and international exports of the United States, Poster presentation at the AGU Fall Meeting, Abstract GC31J-1336, San Francisco, CA 9-13 December 2019.
47. *How sociohydrology can help address the global water crisis, Oral presentation at the AGU Fall Meeting, Abstract H13D-03, San Francisco, CA 9-13 December 2019.
46. **Global climate shocks to agriculture from 1961 to 2014, eLightning presentation at the AGU Fall Meeting, Abstract H34H-04, San Francisco, CA 9-13 December 2019.
45. Trade openness and climate shocks in agriculture, Poster presentation at the AGU Fall Meeting, Abstract GC21C-1257, San Francisco, CA 9-13 December 2019.
44. **Climate shocks, agriculture and trade, Oral presentation at the Civil & Environmental Engineering Rising Stars Workshop, Massachusetts Institute of Technology, Cambridge, MA 24-25 October 2019.
43. **Trade openness and the groundwater depletion of nations, Poster presentation at the AGU Chapman Conference on the Quest for Sustainability of Heavily Stressed Aquifers at Regional to Global Scales, Valencia, Spain, 21-24 October 2019.
42. Groundwater depletion embedded in domestic transfers and international exports of the United States, Oral presentation at the AGU Chapman Conference on the Quest for Sustainability of Heavily Stressed Aquifers at Regional to Global Scales, Valencia, Spain, 21-24 October 2019.
41. **Probabilistic global maps of crop-specific areas from 1961 to 2014, Oral presentation at the Sustainability and Development Conference, Ann Arbor, MI 11-14 October 2019.
40. *Urban-rural linkages and urban food security in Sub-Saharan Africa, Oral presentation at the American Association of Geographers Annual Meeting, Washington DC, 3-7 April 2019.
39. Food flows between counties in the United States, CUAHSI Cyberseminar Series: The U.S. Food, Energy, and Water System at the Mesoscale, 13 February 2019.

38. *Urban-rural linkages and urban food security in Sub-Saharan Africa, Oral presentation at the Open Science Meeting of the Global Land Programme, Contribution ID 306, Bern, Switzerland, 24-26 April 2019.
37. Food flows between counties in the United States, Oral presentation at the AGU Fall Meeting, Abstract 363551, Washington DC, 10-14 December 2018.
36. *Utilizing data fusion to understand and visualize the U.S. food, energy, water nexus at the mesoscale: The FEWSION 1.0 data product, Oral presentation at the AGU Fall Meeting, Abstract H12G-06, Washington DC, 10-14 December 2018.
35. *Quantifying the effect of farmer management decisions on maize yield in Zambia, Oral presentation at the AGU Fall Meeting, Abstract GC51C-05, Washington DC, 10-14 December 2018.
34. **A network analysis of household food sharing in Zambia, Poster presentation at the AGU Fall Meeting, Abstract GC53G-2532, Washington DC, 10-14 December 2018.
33. **Grain and virtual water stocks of the United States, Poster presentation at the AGU Fall Meeting, Abstract H21Q-1018, Washington DC, 10-14 December 2018.
32. **Grain and virtual water stocks of the United States, Poster presentation at the CUAHSI Biennial Colloquium, Shepherdstown, WV 29 Jul-01 Aug 2018.
31. **High-resolution water footprints of production of the United States, Poster presentation at Environmental and Water Resources Institute Congress, Minneapolis MN 3-7 June 2018.
30. **High resolution production water footprints of the United States, Oral presentation at the AGU Fall Meeting, Abstract H32G-07, New Orleans, LA 11-15 Dec 2017.
29. **Drought impacts to water footprints and virtual water transfers of the Central Valley of California, Poster presentation at Environmental and Water Resources Institute Congress, Sacramento CA 21-25 May 2017.
28. *A dynamic framework for water security, Poster presentation at the EGU General Assembly, Abstract EGU2017-4225, Vienna, Austria 28 Apr 2017.
27. **Global crop allocation and climate shocks to agriculture from 1950-2015, Oral presentation at the Midwest Big Data Hub Machine Learning: Farm-to-Table Workshop, Urbana, IL 19 April 2017.
26. **Global climate shocks and crop allocation to agriculture from 1950-2015, Department of Civil & Environmental Engineering Department Seminar, UIUC, Urbana, IL 20 January 2017.
25. **Global climate shocks to agriculture from 1950 to 2015, Oral presentation at the AGU Fall Meeting, Abstract 178184, San Francisco, CA 12-16 Dec 2016.
24. **Drought impacts to water footprints and virtual water transfers of the Central Valley of California, Oral presentation at the AGU Fall Meeting, Abstract 120465, San Francisco, CA 12-16 Dec 2016.
23. Scaling effect in trade network, Poster presentation at the AGU Fall Meeting, Abstract H13G-1620, San Francisco, CA 14-18 Dec 2015.
22. **A theoretical model of water and trade, Poster presentation at the AGU Fall Meeting, Abstract H13G-1617, San Francisco, CA 14-18 Dec 2015.

21. **The water footprint of food aid, Poster presentation at the AGU Fall Meeting, Abstract H13D-1575, San Francisco, CA 14-18 Dec 2015.
20. **Virtual groundwater transfers from overexploited aquifers in the United States, Oral presentation at the AGU Fall Meeting, Abstract H11L-06, San Francisco, CA 14-18 Dec 2015.
19. Crop insurance increases water withdrawals for irrigation in agriculture, Oral presentation at the AGU Fall Meeting, Abstract H33O-04, San Francisco, CA 14-18 Dec 2015.
18. Impact of crop insurance on crop water use, Association of American Geographers Annual Meeting, Abstract 90080767, Chicago, IL 21-25 Apr 2015.
17. Virtual groundwater transfers from overexploited aquifers of the United States, Student Sustainability Initiatives Symposium, Champaign, IL 18 Apr 2015.
16. Agricultural virtual water flows in the USA, Oral presentation at the AGU Fall Meeting, Abstract H41L-05, San Francisco, CA 15-19 Dec 2014.
15. Impact of crop insurance on crop water use, Poster presentation at the Robert B. Daugherty Water for Food Institute, Global Water for Food Conference, Seattle, WA, 21 Oct 2014.
14. Virtual water transfers from overexploited aquifers, Poster presentation at the Robert B. Daugherty Water for Food Institute, Global Water for Food Conferences, Seattle, WA, 21 Oct 2014.
13. Virtual water trade and development in Africa, Oral presentation at the EGU General Assembly, Abstract EGU2014-2027, Vienna, Austria 30 Apr 2014.
12. A theoretical model of water and trade, Poster presentation at the EGU General Assembly, Abstract EGU2014-2028, Vienna, Austria 01 May 2014.
11. Virtual water trade flows and savings under climate change, Poster presentation at the AGU Fall Meeting, Abstract GC13B-1064, San Francisco, CA, 9-13 December 2013.
10. Temporal dynamics of blue and green virtual water trade networks, Poster presentation at the AGU Fall Meeting, Abstract H11H-1277, San Francisco, CA, 3-7 December 2012.
9. *Modeling and predicting the structure of the global virtual water trade network, Poster presentation at the AGU Fall Meeting, Abstract H11H-1278, San Francisco, CA, 3-7 December 2012.
8. *Strengthening students of sustainability: Interdisciplinary approaches, Presented at the Rio +20 International Conference on Sustainable Development, Rio de Janeiro, Brazil, 20 June 2012.
7. Network analysis of global virtual water trade, Seminar, Science, Technology, and Environmental Policy Program, Princeton University, 17 April 2012.
6. Network analysis of global virtual water trade, Seminar, Princeton Energy and Climate Scholars, Princeton University, 24 April 2012.
5. Water for food: The global virtual water trade network, Poster presentation at the AGU Fall Meeting, Abstract GC13A-0965, San Francisco, CA, 5-9 December 2011.
4. *Dynamics of the global virtual water trade network, Poster presentation at the AGU Fall Meeting, Abstract GC13A-0964, San Francisco, CA, 5-9 December 2011.
3. Water for food: A complex network approach to virtual water trade, Princeton Research Symposium, Princeton, NJ, December 2010.

2. Potential impacts of precipitation change on large-scale patterns of tree diversity, Poster presentation at the AGU Fall Meeting, Abstract GC511-0833, San Francisco, CA, 13-17 December 2010.
1. Drinking water in India: Storing monsoon rains in the desert, Oxford Centre for Water Research, University of Oxford, 15 September 2005.

Media

† Coverage of Konar Group research,

‡ Interview with M. Konar

51. †New York Times: “Airlines race towards a future of powering their jets with corn”, by Max Bearak, Dionne Searcey, and Mira Rojanasakul, 30 November 2023.
50. †American Council on Science and Health: “From Farm To Fork: Our Food Supply Chain”, by Chuck Dinerstein, 01 August 2023.
49. †Nature Food: “Logistics hubs hold food supply chains together”, News & Views by Graham K. MacDonald, 20 July 2023, doi: 10.1038/s43016-023-00800-2.
48. ‡Eos: “Taking a fine-grained approach to investigating climate’s impact on crops”, by Jane Palmer, 11 July 2023.
47. ‡Nature Food: “Indirect effects of the Russia-Ukraine conflict have an impact on global food availability”, Research Briefing, 15 June 2023.
46. †Salon: “Crop irrigation has changed, according to a new study”, by Robin Madel, 03 April 2023.
45. ‡Voice of America (Russian language service), by Daria Dieguts, 17 May 2022.
44. ‡WIRED: “The War in Ukraine Is Threatening the Breadbasket of Europe” by Maryn McKenna, 11 March 2022.
43. ‡Illinois Public Media: “The war in Ukraine could cause a global food crisis, U of I professor warns” by Dana Cronin, 07 March 2022.
42. †National Science Foundation: “Understanding the mechanics of global supply chains” by Tamara Dietrich, 18 November 2021.
41. ‡Marketplace: “Food commodity prices highest since 2014, according to UN” by Kristin Schwab, 04 March 2021.
40. †The Christian Science Monitor: “Where’s the beef? Pandemic exposes cracks in US food system” by Stephanie Hanes, 19 May 2020.
39. ‡CBS Chicago: “Food Supply Concerns” television interview with Jim Williams, 27 April 2020.
38. ‡National Public Radio: “Farm To Table: The Coronavirus And America’s Food Supply Chain” radio interview with Grace Tatter and Meghna Chakrabarti, for WBUR On Point, 15 April 2020.
37. ‡National Geographic: “Farmworkers risk coronavirus infection to keep the U.S. fed” by Alejandra Borunda, 10 April 2020.
36. ‡Scientific American: “The Effects of COVID-19 Will Ripple through Food Systems” by Laura Poppick, 26 March 2020.

35. ‡National Geographic: “How beef eaters in cities are draining rivers in the American West” by Alejandra Borunda, 02 March 2020.
34. †The Break It Down Show: “The science of food networks and water” podcast interview with Pete A. Turner, 27 February 2020.
33. †Illinois Innovators: “Mapping the Nation’s Food Supply Chain with Megan Konar” podcast interview with Michael Koon, 20 November 2019.
32. †World Economic Forum: “This fascinating map shows how food moves around the US” by Douglas Broom, 14 November 2019.
31. †Supply Chain Dive: “This map is the first step to understanding risk in the food supply chain” by Matt Leonard, 12 November 2019.
30. †Mother Nature Network: “Look at the long and winding path your food takes to get to your plate” by Mary Jo Dilonardo, 06 November 2019.
29. †Food & Wine: “What really unites Americans? Our food supply” by Mike Pomranz, 30 October 2019.
28. †The New Food Economy: “We mapped how food gets from farms to your home”, repost from The Conversation article by Megan Konar, 30 October 2019.
27. †Fast Company: “The first map of America’s food supply chain is mind-boggling”, repost from The Conversation article by Megan Konar, 28 October 2019.
26. †Agri-Pulse: “New matrix tracks food sector movements” by Ed Maixner, 02 October 2019.
25. ‡Gizmodo: “When will we run out of water?” by Daniel Kolitz, 16 September 2019.
24. ‡The News-Gazette: “Wired In: Megan Konar”, newspaper interview with Paul Wood, 09 June 2019.
23. †WTAX Radio: “UI study links crop insurance to increased water use”, radio interview with Dave Dahl, 09 July 2018.
22. † Associated Press: “Crop insurance is good for farmers, but not always for the environment”, 28 June 2018.
21. † Yale Environment Review: “California: The drought was worse than we thought”, by Rebecca Lehman, 12 June 2018.
20. † Nature Sustainability: “Fresh water input”, by Monica Contestabile , 12 March 2018.
19. † CEE @ Illinois: “International trade can impact water use in agriculture, research finds”, by Kristina Shidlauski, 12 February 2018.
18. † CEE @ Illinois: “California drought led to changes in crops, water sources”, by Kristina Shidlauski, 28 August 2017.
17. ‡The Food Fix: “How investing in infrastructure can make the world less hungry”, podcast interview with Ben Muir, 20 May 2017.
16. †WTAX Radio: “Link between buying crop insurance and using water”, radio interview with Dave Dahl, 15 May 2017.

15. †The 21st, Illinois Public Radio: “Study: Crop insurance linked to increased water usage”, radio interview with Niala Boodhoo, 06 April 2017.
14. †IGPA @ Illinois: “Research shows crop insurance increases water use”, by James Paul, 04 April 2017.
13. ‡WTTW Chicago Tonight: “Air pollution action day issued for Wednesday”, by Reuben Unrau, 27 July 2016.
12. †Yale Environment Review: “Virtual water flows and trade: The complex relationship between agriculture and water”, by Sam Cohen, 21 January 2016.
11. †New York Times: “California wants to store water for farmers, but struggles over how to do it”, by Justin Gillis, 21 December 2015.
10. †LA Times: “Cities’ food supplies are eating into groundwater reserves, study finds”, by Sasha Harris-Lovett, 3 July 2015.
9. †TAKEPART: “Many of your groceries are really just groundwater in disguise”, by Willy Blackmore, 30 June 2015.
8. †TIME Magazine: “How draining global groundwater supplies could harm the food supply”, by Justin Worland, 30 June 2015.
7. †University of Illinois News Bureau: “Study: Groundwater from aquifers important factor in food security”, by Liz Ahlberg, 30 June 2015.
6. †Smithsonian Magazine: “Here’s how U.S. groundwater travels the globe via food”, by Sarah Zielinski, 29 June 2015.
5. †NPR Illinois: “Illinois is nation’s biggest center for food transport”, by Jamey Dunn, 1 February 2015.
4. †Science World Report: “Illinois critical hub for food security: transportation infrastructure helps”, by Kathleen Lees, 18 December 2014.
3. †IGPA @ Illinois: “Study finds Illinois number one hub in food distribution network”, by Kelsey McCoy, Dec 17, 2014
2. ‡Smithsonian Magazine: “Ancient Roman Water Networks Made the Empire Vulnerable”, by Francie Diep, 19 December 2014.
1. ‡INFORM Magazine: “Ideas that hold water”, by Laura Cassiday, Vol 25, Issue 9, October 2014.

Teaching

* indicates List of Teachers Ranked as Excellent

- Spring 2024 **CEE 350: Water Resources Engineering**, Civil & Environmental Engineering Department, UIUC
- Fall 2023* **CEE 598: Globalization of Water**, Civil & Environmental Engineering Department, UIUC
- Fall 2021 **CEE 350: Water Resources Engineering**, Civil & Environmental Engineering Department, UIUC
- Fall 2020 **CEE 350: Water Resources Engineering**, The Zhejiang University-University of Illinois at Urbana-Champaign Institute (ZJUI), Zhejiang University

- Fall 2020 **CEE 598: Globalization of Water**, Civil & Environmental Engineering Department, UIUC
- Fall 2020 **CEE 350: Water Resources Engineering**, Civil & Environmental Engineering Department, UIUC
- Fall 2019 **CEE 598: Globalization of Water**, Civil & Environmental Engineering Department, UIUC
- Fall 2019* **CEE 350: Water Resources Engineering**, Civil & Environmental Engineering Department, UIUC
- Summer 2019 **Food, Energy, and Water Systems (FEWS) in a Global Economy**, Consortium of Universities Allied for Hydrological Sciences Inc. (CUAHSI) Master Course
- Fall 2018 **CEE 598: Globalization of Water**, Civil & Environmental Engineering Department, UIUC
- Fall 2018* **CEE 350: Water Resources Engineering**, Civil & Environmental Engineering Department, UIUC
- Fall 2017 **CEE 598: Globalization of Water**, Civil & Environmental Engineering Department, UIUC
- Fall 2017 **CEE 350: Water Resources Engineering**, Civil & Environmental Engineering Department, UIUC
- Summer 2017 **Water Sustainability in a Global Economy**, Consortium of Universities Allied for Hydrological Sciences Inc. (CUAHSI) Master Course
- Fall 2016 **CEE 598: Globalization of Water**, Civil & Environmental Engineering Department, UIUC
- Fall 2015 **CEE 598: Globalization of Water**, Civil & Environmental Engineering Department, UIUC
- Fall 2015 **CEE 350: Water Resources Engineering**, Civil & Environmental Engineering Department, UIUC
- Fall 2014 **CEE 350: Water Resources Engineering**, Civil & Environmental Engineering Department, UIUC
- Spring 2014 **CEE 350: Water Resources Engineering**, Civil & Environmental Engineering Department, UIUC
- Fall 2013 **CEE 597: Research Topics in Virtual Water**, Civil & Environmental Engineering Department, UIUC
- Fall 2013 **CEE 350: Water Resources Engineering**, Civil & Environmental Engineering Department, UIUC
- Spring 2012 **TA, ENV 201: Introduction to Environmental Studies**, Civil & Environmental Engineering Department, Princeton University

Professional Service & Leadership

- 2024-2025 **Proposer**, Special Issue on Food Systems and International Trade, Environmental Research: Food Systems.
- 2024-2025 **Guest Editor**, Special Issue on Networks and Graphs for Engineering Systems and Design, Journal of Computing and Information Science in Engineering.
- 2024- **Chair**, Graduate Ambassadors Committee, Civil & Environmental Engineering Department, UIUC

- 2024- **Chair**, Graduate Admissions, Water Resources Engineering & Science (WRES), Civil & Environmental Engineering Department, UIUC
- 2023-2024 **Faculty search committee**, Water Resources Engineering & Science (WRES), Civil & Environmental Engineering Department, UIUC
- 2023-2025 **Member**, Curriculum and Course Committee, The Grainger College of Engineering, UIUC
- 2023-2025 **PhD Committee**, Jennifer Nugent (Advisor: Ashlynn Stillwell)
- 2021-2023 **PhD Committee**, Zoe Ao (Advisor: Landon Marston, Virginia Tech)
- 2022 **Convener**, AGU Frontiers in Hydrology Meeting, Session “501: Burning Questions in the Water and Society Community: What Research on Human-Water Systems Should Be Prioritized to Best Serve Society?”
- 2021 **Convener**, AGU Fall Meeting, Session “GC11B: MultiSector Dynamics: Science and Modeling for Societal Transformations”
- 2021 **Convener**, AGU Fall Meeting, Session “H41H: Water and Society: Water Resources Management and Policy in a Changing World”
- 2021-2022 **Co-Chair**, Committee to develop B.S. in Environmental Engineering, Civil & Environmental Engineering Department, UIUC
- 2021-2022 **Chair**, Sustainable & Resilient Infrastructure Systems (SRIS) program, Civil & Environmental Engineering Department, UIUC
- 2021 **Seminar coordinator**, Water Resources Engineering & Science (WRES) seminar, Civil & Environmental Engineering Department, UIUC
- 2020 **Convener**, AGU Fall Meeting, Session “GH023: Food System, Food Security, and Food-Related Human Health Responses to COVID-19 and Other Pandemics”
- 2020 **Convener**, AGU Fall Meeting, Session “H173. Water and Society: Water Resources Management and Policy in a Changing World”
- 2020 **Convener**, AGU Fall Meeting, Session “GC033. Connecting Cause and Effect in Analyses of Coupled Human and Geophysical Systems”
- 2020-present **Director**, Center for Food Systems Security (CFSS), National Center for Supercomputing Applications (NCSA), UIUC
- 2020-present **Deputy Chair**, AGU Water & Society Technical Committee
- 2019 **Convener**, AGU Fall Meeting, Session “H21G. Water and Society: Water Resources Management and Policy in a Changing World”
- 2019 **Convener**, AGU Fall Meeting, Session “GC23A. Connecting Cause and Effect in Data-Driven Analyses and Vulnerability Assessments of Coupled Human and Geophysical Systems with a Special Focus on Extreme-Driven Impacts”
- 2019 **Qualifying exam coordinator**, Water Resources Engineering & Science (WRES) program, Civil & Environmental Engineering Department, UIUC
- 2019-present **Associate Editor**, Water Resources Research
- 2019-present **At-Large Member**, MultiSector Dynamics (MSD) Science Steering Group (SSG)

- 2018-2020 **PhD Committee**, Tushar Apurv (Advisor: Ximing Cai)
- 2018-2019 **Member**, Faculty search committee, Civil & Environmental Engineering Department, UIUC
- 2018-present **Member**, Curriculum Committee, Civil & Environmental Engineering Department, UIUC
- 2019-present **Member**, Environmental and Water Resources Systems (EWRS) committee, Environmental and Water Resources Institute (EWRI) of the American Society of Civil Engineers (ASCE)
- 2019 **Seminar coordinator**, Energy, Water & Environmental Sustainability (EWES) Program, Civil & Environmental Engineering Department, UIUC
- 2018-2019 **Member**, Food & Agriculture Working Group, Discovery Partners Institute (DPI) of the Illinois Innovation Network (IIN)
- 2018-2020 **Secretary**, AGU Water & Society Technical Committee
- 2018-present **Representative**, UIUC representative to the Consortium of Universities for the Advancement of Hydrologic Sciences, Inc. (CUAHSI)
- 2018-2019 **Coordinator**, Graduate Admissions, Energy, Water & Environmental Sustainability (EWES) Program, Civil & Environmental Engineering Department, UIUC
- 2016-2018 **PhD Committee**, Chris Chini (Advisor: Ashlynn Stillwell)
- 2018 **Convener**, AGU Fall Meeting, Session “Water and Society: Water Resources Management and Policy in a Changing World”
- 2018 **Convener**, CUAHSI Biennial Conference, Session “Water-Food Nexus”
- 2017 **Proposer**, Special Issue, Water Resources Research “Spatial and temporal dynamics of coupled human-water systems”
- 2017 **Panelist**, National Science Foundation, National Research Traineeship Program
- 2017 **Panelist**, National Defense Science & Engineering Graduate Fellowship
- 2017 **Reviewer**, Nature, Proceedings of the National Academy of Sciences, Environmental Research Letters (3), Water Resources Research, Environmental Science & Technology, Global Environmental Change, Water Resources Economics, Advances in Water Resources (2), Review of Geophysics, Resources, Conservation & Recycling
- 2017 **Seminar coordinator**, Environmental Hydrology & Hydraulic Engineering (EHHE) Program and Energy, Water & Environmental Sustainability (EWES) Program, Civil & Environmental Engineering Department, UIUC
- 2015-2017 **PhD Committee**, Erhu Du (Advisor: Barbara Minsker & Ximing Cai)
- 2015-2017 **PhD Committee**, Alison Goodwell (Advisor: Praveen Kumar)
- 2016 **Reviewer**, Environmental Science & Technology, Advances in Water Resources, Global Environmental Change, Nature Communications, Science of the Total Environment, Earth System Dynamics
- 2016 **Convener**, AGU Fall Meeting, Session “OS002. Linking science and human impacts”
- 2016 **Chair**, AGU Fall Meeting, Session “OS11A. Measuring and Modeling the Anthropocene”

- 2016 **Chair**, AGU Fall Meeting, Session “H32C. Food, Energy & Water Nexus: Synergies & Tradeoffs”
- 2015 **Panelist**, National Science Foundation, Environmental Engineering CAREER
- 2015 **Panelist**, National Science Foundation, Graduate Research Fellowship
- 2015 **Chair**, AGU Fall Meeting, Session “H002. Food Security in the Water-Food-Energy Nexus”
- 2015 **Convener**, EGU General Assembly, Session “HS5.12. Water Footprint Assessment”
- 2015 **Convener**, AGU Fall Meeting, Session “H116. Water Footprint Assessment”
- 2015 **Convener**, AGU Fall Meeting, Session “H002. Food Security in the Water-Food-Energy Nexus”
- 2015 **Reviewer**, Environmental Research Letters, Advances in Water Resources (2), Water Resources Research (4), Sustainability, Water Resources Planning & Management
- 2015-2019 **Faculty lead**, Girls Adventures in Mathematics, Engineering, & Science (GAMES) camp
- 2014-present **Member**, European Geophysical Union
- 2013-2014 **PhD Committee**, Xiao Zheng (Advisor: Ximing Cai)
- 2014 **Participant**, NSF RCN Urban Sustainability, Arizona State University
- 2014 **Chair**, AGU Fall Meeting, Session “H41L. Water Footprint Assessment I”
- 2014 **Convener**, AGU Fall Meeting, Session “H41L. Water Footprint Assessment”
- 2014 **Panelist**, National Science Foundation, Polar Symposium
- 2014 **Reviewer**, Proceedings of the National Academy of Sciences, Environmental Science & Technology, Water Resources Research, Water Resources Planning and Management, World Development, Water, Journal of Industrial Ecology
- 2013-present **Member**, Association of Environmental Engineering and Science Professors
- 2013 **Participant**, DISCCRS VIII Symposium
- 2013 **Organizer**, Environmental Hydrology & Hydraulic Engineering seminar, UIUC
- 2013 **Reviewer**, Geophysical Research Letters, Global Environmental Change, Water Resources Research, PLOS One, Hydrology & Earth System Sciences (3), Climate Research
- 2012 **Convener**, AGU Fall Meeting, Session “H82. Trade and the Environment”
- 2012 **Participant**, Communicating Climate Change Workshop, Columbia University
- 2012 **Reviewer**, Proceedings of the National Academy of Sciences, Land Use Policy
- 2011-2012 **Member**, Princeton Energy & Climate Scholars, Princeton Environmental Institute
- 2011 **Chair**, AGU Fall Meeting, Session “GC11C. Climate Change, Food, and Water I”
- 2011 **Convener**, AGU Fall Meeting, Session “H68. Water, Food, and Trade”
- 2011 **Participant**, Short Course in Global Economic Analysis, Purdue University
- 2011 **Participant**, Short Course in Research Design for Causal Inference, Northwestern University
- 2011 **Reviewer**, Journal of Geophysical Research
- 2010 **Participant**, Symposium on Network Visualization, Harvard University

- 2010 **Manager**, Princeton Reunions, Association of Princeton Graduate Alumni
- 2009-2011 **Representative**, Princeton Graduate Engineering Council
- 2009-present **Member**, American Geophysical Union
- 2008-2009 **Organizer**, Civil & Environmental Engineering Seminar, Princeton University
- 2007-2012 **Member**, Graduate Women in Science & Engineering, Princeton University
- 2007 **Intern**, Environmental Law & Policy Center, Chicago
- 2006 **Researcher**, Global Water Intelligence, Oxford
- 2005 **Intern**, Institute for Public Policy Research, London
- 2004 **Chair**, Environmental Committee, Hertford College, University of Oxford
- 2002-2004 **Scientist**, United States Army Corps of Engineers, Chicago
- 2000 **Intern**, Northern Environmental Technologies, Chicago

Students

Ph.D. Students

11. **Arushi Arnav**, (current)
10. **Rui Zhang**, (current)
9. **Jack Hanley**, (current)
8. **Akshay Pandit**, (current)
7. **Junren Wang**, (current)
6. **Deniz Berfin Karakoc, Ph.D. 2022**
 - Dissertation title: “Enhancing the resilience of agri-food flow networks across spatial scales”
 - Placement: Assistant Professor, Industrial Engineering, Arizona State University
5. **Paul Ruess, Ph.D. 2022**
 - Dissertation title: “Virtual water storage and flows within the Continental United States”
 - Placement: Postdoc, Virginia Climate Center at George Mason University
4. **Nicole Jackson, Ph.D. 2020**
 - Dissertation title: “From global to local: Understanding linkages between climate shocks and food security”
 - Placement: Postdoc, Sandia National Laboratories
3. **Xiaowen Lin, Ph.D. 2019**
 - Dissertation title: “Understanding and modeling food flow networks across spatial scales”
 - Placement: Software Engineer, Google
2. **Qian Dang, Ph.D. 2018**

- Dissertation title: “Understanding linkages between trade and water resources”
 - Placement: Data Scientist, Facebook
1. **Landon Marston, Ph.D. 2017**
 - Dissertation title: “Human mediated physical and virtual water transfers of the United States: Who uses the water?”
 - Placement: Assistant Professor, Civil and Environmental Engineering, Kansas State University

M.S. Students

5. **Akshay Pandit, M.S. 2020**
 - Thesis title: “How does trade impact agricultural productivity?”
 - Placement: Ph.D. student in Konar Group
4. **Junren Wang, M.S. 2020**
 - Thesis title: “Exposure of urban Food-Energy-Water (FEW) supply chains to water scarcity in China”
 - Placement: Ph.D. student in Konar Group
3. **Rachel von Gnechten, M.S. 2019**
 - Thesis title: “A network analysis of household food sharing in Zambia”
 - Placement: Research Analyst, International Water Management Institute (IWMI) at the International Food Policy Research Institute (IFPRI)
2. **Sajani Gumidyala, M.S. 2018**
 - Thesis title: “Groundwater depletion embodied in transfers and exports of the United States”
 - Placement: Consultant, KIT Professionals, Inc.
1. **Qian Dang, M.S. 2015**
 - Thesis title: “Agricultural virtual water flows within the USA”
 - Placement: Ph.D. student in Konar Group

Advisee Fellowships and Awards

- Dissertation Completion Fellowship, Graduate College, 2023-2024 (Karakoc)
- Mavis Future Faculty Fellowship, 2023-2024 (Karakoc)
- Arms Control & Domestic and International Security Fellowship, 2023 (Karakoc)
- Loh Kwan Chen Fellowship, 2023 (Wang)
- Mavis Future Faculty Fellowship, 2020-2021 (Ruess)
- Mavis Future Faculty Fellowship, 2018-2019 (Jackson)
- MIT Rising Stars in CEE, 2019 (Jackson)
- Young Scholars Summer Program (YSSP) at the International Institute of Applied Systems Analysis (IIASA), 2019 (Ruess)
- U.S. Borlaug Summer Institute on Global Food Security Fellow, 2018 (von Gnechten)
- Alfred P. Sloan Scholarship, 2017-2020 (Ruess)
- Global Food Security Symposium Fellow with The Chicago Council on Global Affairs, 2018 (Marston)
- Universities Council on Water Resources (UCOWR) Ph.D. Dissertation Award in Water Policy and Socioeconomics, 2018 (Marston)
- Ben Chie Yen Memorial Fellowship, 2017 (von Gnechten)
- David R. and Helen J. Maidment Fellowship, 2017 (von Gnechten)
- Ravindar K. and Kavita Kinra Fellowship in Civil and Environmental Engineering, 2016 (Gumidyala)
- SURGE College of Engineering Fellowship, 2016 (Gumidyala)
- Mavis Future Faculty Fellowship, 2016-2017 (Marston)
- National Defense Science & Engineering Graduate Fellowship, 2014-2017 (Marston)